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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/939,384	08/24/2001	John Anthony Tejada	004578.1152	3457
7590		08/11/2004	EXAMINER	
Baker Botts L.L.P.		HASAN, MOHAMMED A		
2001 Ross Avenue, Suite 600		ART UNIT		
Dallas, TX 75201-2980		PAPER NUMBER		

2873

DATE MAILED: 08/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/939,384

Applicant(s)

TEJADA ET AL.

Examiner

Mohammed Hasan

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3 - 8, 10, 11, 13 - 17, 19 - 34 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 1, 3 - 8, 10, 11, 13 - 17, 19 - 29, and 32 - 34 is/are allowed.
6) ☒ Claim(s) 30 is/are rejected.
7) ☒ Claim(s) 31 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 11 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Oath/Declaration

1. Oath and declaration filed on 12/11/2001 is accepted.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 30 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Shen et al (5,282,016).

Regarding claim 30, Shen et al discloses (refer to figure 1) a method for providing optical alignment for a visible wavelength reflective system (e.g., telescope 20) having a first mirror blank (22) and the first mirror blank having a single precision pinhole (30) aligned with an axis of rotation of lathe and generating a first mirror (22) from the first mirror blank. Shen et al discloses all of the claim invention except securing the first blank to the lathe fixture. However, Shen discloses the primary mirror (22), the secondary mirror (24) and the sensor 32 are supported in their respective positions by a frame (36) (column 4, lines 25 – 49).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a lathe fixture in an optical alignment system since the examiner takes official notice of the equivalence of supported frame (36) and lathe fixture for their use in the optical alignment process and the selection of any of these known equivalents to hold the optical components would be within the level of ordinary skill in the art.

Allowable Subject Matter

3. Claims 1, 3 - 8, 10, 11, 13 – 17, 19 – 29, and 32 - 34 are allowed.
4. The following is an examiner's statement of reasons for allowance: The prior art taken either singularly or in a combination fails to anticipate or fairly suggest the limitations of the independent claims, in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed features as presented in independent claims 1, 8, 11, 17, 25, 29, and 32 – 34 for example which include a method for providing optical alignment for a visible wavelength reflective system comprising: the first mirror comprising a tolerance stack-up associated with the assembly housing of less than 6.0 microns in a single direction (claim 1); and the positioning a second mirror blank on the lathe fixture, the second mirror blank having a single precision pinhole and generating a second mirror from the second mirror blank (claim 4) ; and the first mirror comprising a tolerance stack-up associated with the assembly housing of less than 6.5 microns in a single direction and the second

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mirror comprising a tolerance stack-up associated with the assembly housing of less than 6.0 microns in a single direction (claim 8, 17); the mirror blank having bolt holes and the mirror blank operable to be secured to the lathe fixture through the bolt holes (claim 11); a lathe fixture operable to be received in a lathe and the lathe fixture having a single precision pin and a mirror blank operable to be secured to the lathe fixture and the lathe operable to generate a mirror from the mirror blank (claim 25, 33); and securing the second mirror to the assembly housing through the second precision pinhole and wherein the first precision pinhole and the second precision pinhole lie along optical axis of the reflective system (claim 29, 32, and 34)

5. Claim 31 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter: The prior art fails to show, positioning a second mirror blank on the lathe fixture and the second mirror blank having a single precision pinhole.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The closest prior art

Nagaoka (6,697,200 B2) discloses a light weight head mounted image display device.

Response to Arguments

8. Applicant's arguments filed 6/2/2004 have been fully considered but they are not persuasive.

9. In response to applicant's argument that Shen et al (5,282,016) discloses, a method for aligning a first element with a second element of an optical system (e.g., a telescope 20) having a primary mirror (22) and a secondary mirror 24 for viewing a distance subject 26 and rays 28 of radiation emanating from the subject 26 are captured by a concave reflecting surface of the primary mirror 22 and directed towards a convex reflecting surface of the secondary mirror 24 and further discloses a central hole 30 in the primary mirror 22 to impinge upon a sensor 32 which senses the intensity of the radiation and outputs an electric signal to an imaging system 34 (refer to figure 1, column 4, lines 25 – 49).

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within


TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammed Hasan whose telephone number is (571) 272-2331. The examiner can normally be reached on M-TH, 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on (571) 272- 2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MH
July 24, 2004


Georgia Epps
Supervisory Patent Examiner
Technology Center 2800